Role of Artificial intelligence in Marketing Automation

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Abstract:

Artificial intelligence (AI) and marketing automation have become indispensable tools for modern marketers, allowing them to automate and optimize various tasks across the marketing spectrum. Marketing automation, or MA, involves automating marketing processes and workflows using technological applications, enabling marketers to execute strategies more efficiently. This includes sending scheduled campaigns across multiple channels such as email, social media, and SMS, as well as designing customer journeys based on predetermined series of activities in response to specific consumer actions. AI, particularly machine learning, plays a crucial role in enhancing marketing automation by providing advanced analytics, personalized insights, and predictive capabilities. This paper explores the integration of AI into marketing automation and its impact on customer understanding, engagement, campaign optimization, lead management, and customer service. Additionally, it discusses the growing market size of AI and its widespread applications in digital marketing, highlighting its role in driving the fourth industrial revolution (IR4.0). The conclusion emphasizes the need for marketers to adapt to AI-integrated technologies and develop the necessary skills to leverage its potential effectively.

Keywords: Artificial intelligence, marketing automation, machine learning, customer engagement, campaign optimization, digital marketing

Introduction:

The programming of machines to think like people in order to make decisions or gain insights is known as artificial intelligence, or AI. Artificial Intelligence has a wide range of applications in several businesses and subfields; its most well-known subset is machine learning.

Finding new market niches, streamlining message distribution, and coordinating multichannel marketing efforts are common applications in marketing.

Analytics with AI Artificial intelligence has several applications in marketing analytics. Some concentrate on analyzing consumer data to find fresh perspectives on communication. For instance, Natural Language Processing (NLP), a type of AI, can be used to determine how a client feels about a particular brand interaction, giving useful information about the message that should be conveyed to them.

Example: Email Automation

Email automation might just be the most common use of marketing automation. Since email was one of the first digitally native mass communication channels, marketers looked for automations to manage the sheer volume of messages they needed to send. All email automation tools include the ability to schedule an email to be sent at a specific time, for example 9:00AM EST. Some advanced solutions will allow this time to be dynamic, for example 9:00AM based on the customer's time zone. As previously mentioned, solutions that leverage AI, will allow for send time optimization, meaning that the same email will be sent at different times based on previous customer behaviors.

Objective

Artificial intelligence (AI) is revolutionizing marketing automation by enhancing efficiency, personalization, and decision-making processes.

The objectives of using AI in marketing automation include:

a) **Enhanced Customer Understanding.**

b) **Improved Customer Engagement.**

c) **Optimized Marketing Campaigns.**

d) **Streamlined Lead Management.**

e) **Enhanced Customer Service.**

ARTIFICIAL INTELLIGENCE IN MARKETING MARKET SIZE, 2022 TO 2032 (USD BILLION)

Source: www.precedenceresearch.com
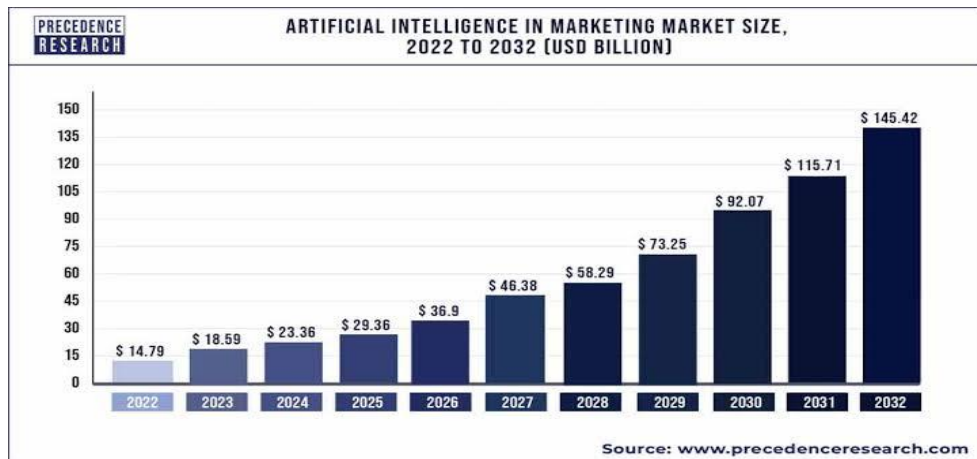
Methodology: Approach

Generally speaking, automated marketing is the practice of streamlining and automating online marketing tasks through the use of technology and software. Beyond being aware of the marketing objectives and The most important thing to understand before putting automated marketing processes into place is what the steps entail. Automated marketing involves three primary steps in automated market :

*Proper **Correct recognition of keywords** [16]

Using Google Trends to view the year-over-year evolution and seasonality of the most popular searches performed by all users is a useful method for keyword research [17]. Voice search volume is growing steadily and is predicted to continue growing as the number of AI-powered gadgets and personal assistants keeps rising. Therefore, apart from appropriate keywords.

- **Detection of patterns [18] based on the received data:**

A system is used to gather information on website visitor activity for the purposes of personalization, behavioral targeting, Internet shopping, social networking, affiliate marketing, and online advertising. the rationale behind visitor interest profiling. After then, the website's content can be dynamically changed to more closely reflect the visitor's profile. The website's web log data or the visitor's client browser are the primary sources of the visitor activity data (such as the page identifier, page links, and previous page identifier). A database is eventually used to store the gathered data. Most of the time,

information gathered on every client enables the creation of empirical values. After combining data, inferences can be made through data analysis.

- **Making choices and forecasting**

The visitors are profiled based on the volume of data gathered. It is possible to forecast and suggest to a visitor how they will react to the content displayed on the internet. The data produced from the profiling process are varied and occasionally may appear a little arbitrary, such as an approximation of an individual's age, marital status, income, residence, and other socio-demographic

information. However, even more intricate fields of data with varying degrees of sensitivity can be acquired, including a person's life expectancy, work performance, health (including health status, medical history, and chance of contracting particular diseases), personal interests (such as a preference for particular brands or products, or sports), behavioral patterns, and many more.
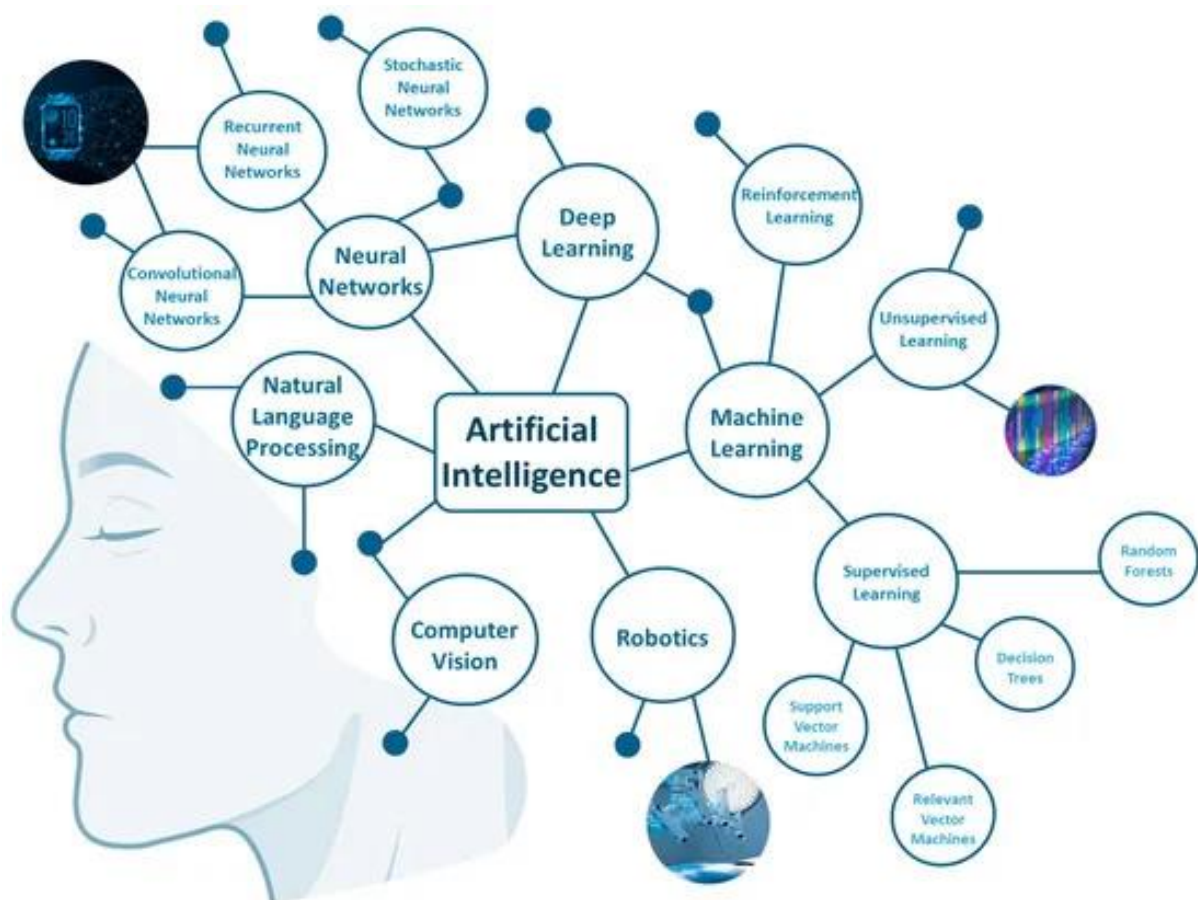
Data Analysis :

Artificial intelligence (AI) is significantly transforming marketing automation by leveraging advanced data analysis techniques. AI enhances marketing strategies through personalized customer insights, optimized campaign performance, and streamlined lead management. By utilizing AI algorithms, marketers can understand customer behavior, engage with them more effectively, and predict campaign outcomes with greater accuracy. AI-driven automation also reduces operational costs and enhances efficiency by automating repetitive tasks, allowing marketers to focus on strategic decision-making. Ultimately, AI in marketing automation enables businesses to deliver tailored experiences, improve marketing ROI, and achieve scalable growth in a data-driven and adaptive manner.
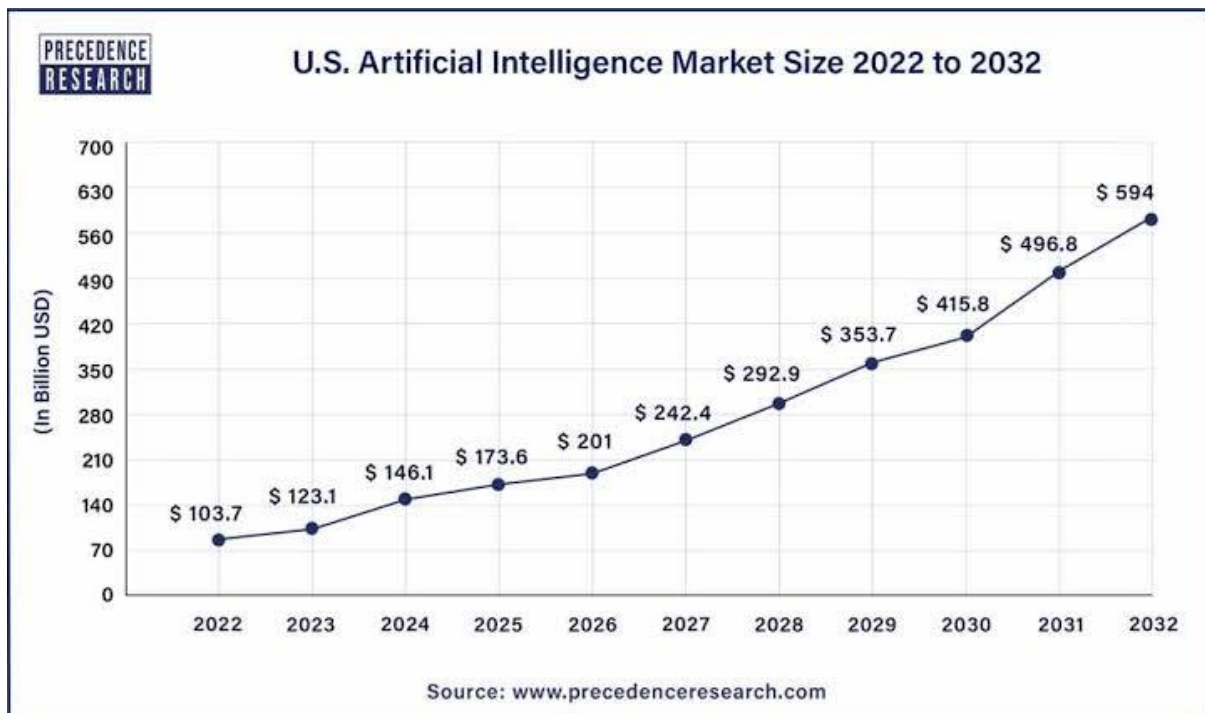

The market size of Artificial Intelligence is becoming very big. If we look at the data of the last few years, its speed is increasing very fast, in 2022 it will be 103 billion

dollars and in 2023 it increased to 123 billion dollars and currently it is 146 billion dollars and it is estimated that by 2032 it will become a market of about 600 billion dollars.

AI in digital marketing:

The market of Artificial Intelligence is spreading in almost every field. Its area is growing very fast. In the last few days, social media has seen a lot of growth due to Artificial Intelligence and similarly, there has been a growth in any market. For example, in customer behavior, in e-commerce, in digital advertising, budget optimization, competitive strategy, the growth of Artificial Intelligence is being seen very fast in this field.
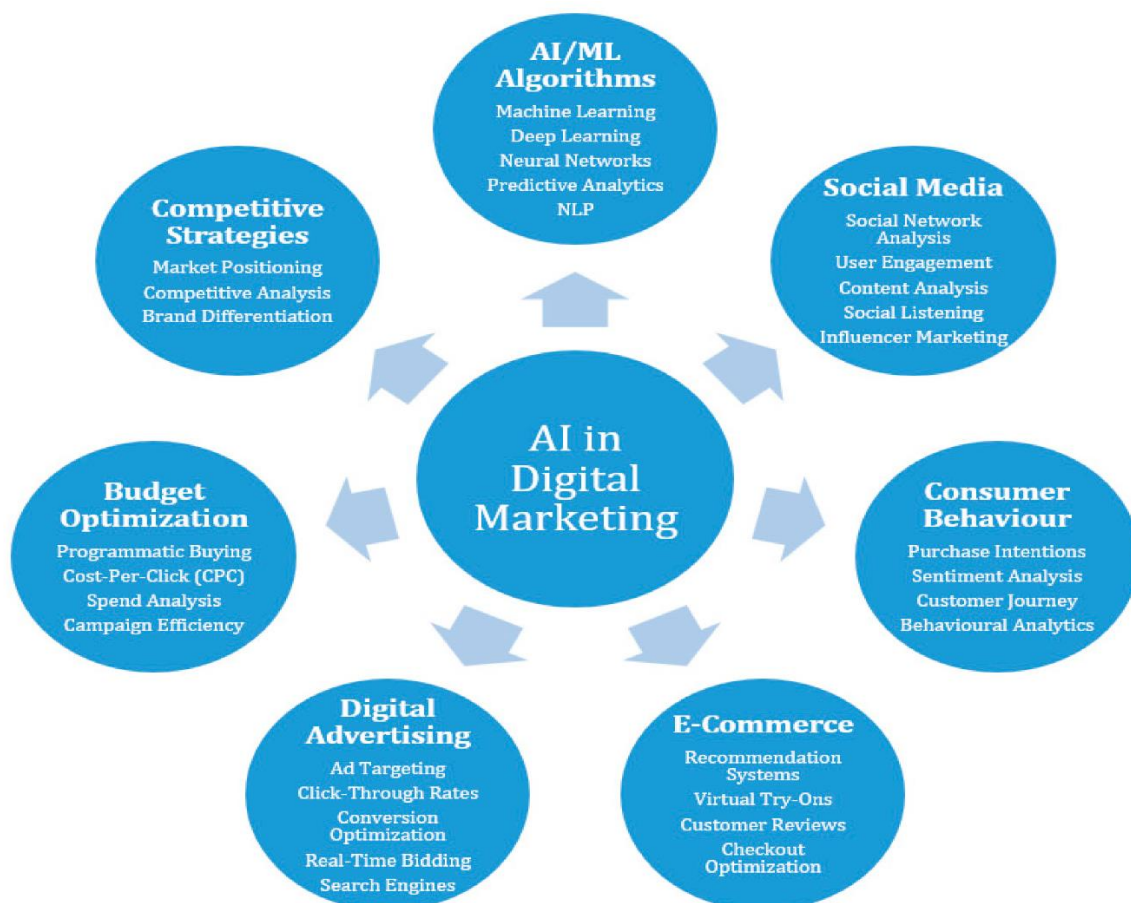
Conclusion:

In summary

Digitalization, information and communications technology, machine learning, robots, and artificial intelligence have propelled the fourth industrial revolution (IR4.0), which will bring about more

shifting from human to computer decision-making. AI is seen as a "competitive advantage" that systematizes and streamlines communication amongst marketing stakeholders. This article outlines numerous AI-integrated technologies that are, if not entirely ignored, appearing to be understudied at the moment in marketing tactics. In order to efficiently apply the technology, implicit knowledge must be transferred into AI systems in order to reduce the enormous amount of data that is needed in order to develop intricate, comprehensive, and precise managerial objective tasks or functions in marketing. It would be equally vital to develop human capacity to receive knowledge structures that AI algorithms have independently developed.

All regular, conventional, and repeatable tasks have been and still are the areas where automation and technology in sales have had the most effects. AI technology plays a supportive role in many of the above-discussed scenarios to increase the efficiency of the selling functions. In the future, maybe the biggest influence

The activities and endeavors involved in comprehending consumer behavior to create and provide highly tailored offers will be the focus of digitalization in sales. Furthermore, technology will be able to work closely with salespeople to increase their efficacy by acting as an active facilitator of decisions, and in certain situations, even acting as a decision-maker. Consumer behavior includes things like the formation of consideration sets, the creation of preferences and utilities through consumption, social impact.

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